

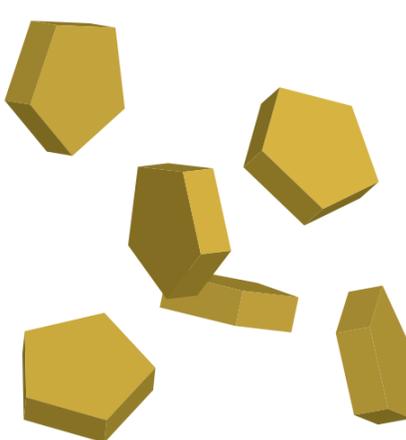
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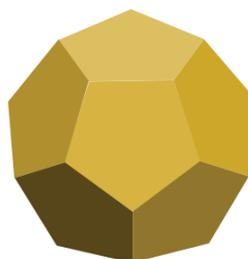


Self-Assembling Virus

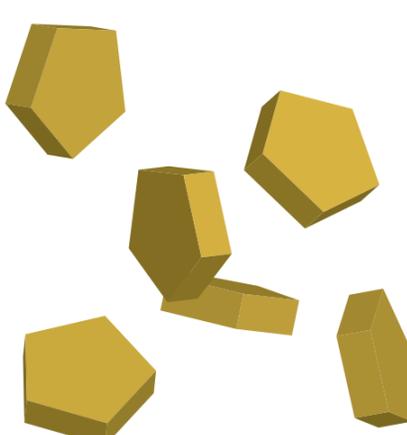
Viruses are not truly “living” organisms, but they reproduce by making copies of themselves and can spontaneously assemble. Conditions have to be just right - if an environment is too hot, or too cold, a virus will disassemble. Molecules move around more at higher temperatures - try it yourself by shaking up the virus particles and watch them come together, and apart, and back again!



TOO HOT! Vigorous shaking mimics high temperatures - viral components will move around too much to stay together.



JUST RIGHT! At the right temperature - and just enough shaking - viral proteins will stick together to form the capsid, a shell that contains the viral genomic material.



TOO COLD! Without enough heat to make virus particles interact, its component parts will not come in contact for assembly.



National Institutes of Health